5 ACCORDINGLY, WHAT IS CLAIMED IS:

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- 1. Optical fiber cable with a cable core, which shows at least one optical transmission element, with a cable jacket surrounding the cable core and with a plastic film surrounding the cable core, which is in contact with the cable jacket and which shows a material, which is also contained in the cable jacket, which glues it to the cable jacket during extrusion of the cable jacket.
- 2. Optical fiber cable according to claim 1, wherein the cable jacket and the plastic film containing at least one common material from a group having polyethylene, polypropylene or polyvinyl chloride.
- 3. Optical fiber cable according to claim 1, wherein the cable core containing a filling compound, which has a drip point below the extrusion temperature of the cable jacket, and the optical fiber cable not showing any film or swell tape wraps, which can be separated from the cable jacket.
- 4. Process for the manufacture of an optical fiber cable with a cable core, which contains at least one optical transmission element, and with a cable jacket surrounding the cable core, where a plastic film is applied to the cable core before the extrusion of the cable jacket, where the plastic film contains a material, which is also contained in the cable jacket, and where the cable jacket is extruded over the cable core and brought into contact with the plastic film in such a way, that it glues to the cable jacket during its extrusion.

5 5. Process according to claim 4, wherein the cable core being filled before extrusion of the cable jacket with a filling compound, which has a drip point below the extrusion temperature of the cable jacket.